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ABSTRACT

Connections between structural-developmental psychology and field experience education are addressed. In addition to summarizing principles of structural-developmental psychology and relevant research findings, a comprehensive view of individual development is related to the philosophical aims of higher education, and developmental and dualistic models of education are contrasted. To consider the implications of stage theories for practices in experiential education, attention is directed to: involvement in constructivistic thinking and action, optimal matching, opportunities for role-taking, reconstruction of experience and reflective thinking, and constructive evaluation and feedback. The structural-developmental framework views the student as progressing through sequential stages in the distinct but related domains of intellectual, moral, social, and aesthetic development. Field experience participants learn how to appropriately match the various levels of intellectual functioning with real situations and problems. The developmental perspective is helpful in creating programs/situations that help students learn and grow. Appendices identify levels/stages of: intellectual development, moral thought, adult social development in the domains of education and work, and adult aesthetic development. (SW)

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FIELD EXPERIENCE EDUCATION
and
STAGE THEORIES OF DEVELOPMENT

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January 1981

ABSTRACT

This paper presents the connections between structural-developmental psychology and field experience education. In Section I, a comprehensive view of individual development is related to the philosophical aims of higher education. This section is brief. A developmental model is contrasted with a dualistic model of education. In Section II, fundamental principles of structural-developmental psychology are summarized as are several research findings which have significant implication. In Section III, the implications of stage theories for practices in field experience education are discussed. Excerpts of questions and answers from presentations I made at workshops at the NSIEE conferences in 1978 and 1981 are included since these discussions clarified several theoretical points.

The most important advance in educational theory, in my view, during the last generation comes not from philosophy but from psychology. Philosophical statements of the aims of higher education have almost always emphasized intellectual, moral and personal development. Recent formulations, concerning the purposes of higher education such as that of the Carnegie Commission, follow deep traditions:

> ". . . the provision of opportunities for the intellectual aesthetic, ethical, and skill development of individual students and the provision of campus environments which can constructively assist students in their more general developmental growth."
>
> Carnegie Foundation, 1977

I. Comprehensive View of Individual Development

Significant advances have been made in educational theory through the identification, by the structural-developmental branch of psychology, of developmental stages in the student's educational progression toward these aims or goals of higher education. Beginning with the findings and the approach of the Swiss Psychologist Jean Piaget, whose pioneering research traced the individual's development from infancy through adolescence, Piaget's followers have studied development in the later adolescence and adulthood. Understanding the psychological stages of individual development, their developmental-philosophical nature, and the process of their formation is not only useful for practitioners of field experience education, it is essential if experiential education is to overcome its second-class status as a supplement to "real" learning, academic knowledge that can only take place in classrooms.

Experiential education is often conceptualized in a fashion which unnecessarily limits what students can gain from it:

1) experiential learning is viewed as "soft" knowledge, as an "add-on" to academic knowledge;

2) work is viewed as resulting in practical knowledge rather than in intellectual knowledge, or as doing versus thinking, or as career education versus liberal education;

3) occupations are viewed as work instead of as settings where study, learning, and development can take place;

4) personal development is viewed as a source of potential personal affective growth but not as a potential source for cognitive, intellectual growth; and

5) academic credit can only be earned for classroom learning and not for experiential learning.

These dualisms are an incorrect contradistinction between conceptual and practical knowledge, between thinking and doing, between knowing and feeling (Dewey, 1895; 1936; Piaget, 1967; Kohlberg, 1981). Cognition and affect, and thinking and doing are always interrelated. These dimensions are different aspects of organic wholes which progressively develop through increasingly complex, more differentiated and integrated, forms of both thought and affect, conceptualization and action constructed by the individual. Although this paper will only present the relationships between structural-developmental psychology and higher education, there are other schools of thought in developmental psychology: "life-span" stage theory or phasic developmental theory (Newgarten, 1969; Levinson, 1974; Gould, 1972; Sheehy, 1974;) and psychosocial developmental theory (Erickson, 1974) which have had considerable prominence, perhaps even greater popularity. Although life-span phases and psychosocial stages provide a useful context

or background for adult re-entry education, and despite the characterization of age related changes, these theories tend to suffer from dualisms as well. Life-span and psychosocial developmental theories stress personal and affective development without clarifying their connections with cognitive or intellectual development. Nor do they express the relationship between personal development and the philosophic aims of higher education. Also, while findings such as Gould's and Sheehy's seem to be accurate characteristics for middle-class and upper-middle class individuals, these age characteristics do not apply to others, i.e., the theories do not have universality. Finally, another critical weakness is that the developmental-philosophic view of the aim of education presupposes that a later stage is a more adequate stage while life-span psychology and stage theories assume that movement may occur to a later stage, but do not assume that a later stage is a more adequate stage in a philosophical sense. The practical usefulness of these theories for educators is therefore quite ambiguous from the point of view of higher education, especially for traditional age students.

II. Structural-Developmental Psychology; Concepts and Findings

The structural-developmental framework views the student as progressing through sequential stages in the distinct but related domains of intellectual, moral, social and aesthetic development. (In this paper, the terms "stages" and "levels" are used interchangeably.) The domain of intellectual, or cognitive development represents the structure of the individual's thinking about the nature of reality (Piaget, 1952). Piaget

assumed that the highest stage of intellectual development (and moral development as well) was reached by adolescence at the ages 12-15, something which has not found empirical support (Langer, Haan, Kuhn and Kohlberg, 1977). Piaget's theories and findings inspired further research in intellectual development and research in other domains as well. Table I in the Appendix summarizes findings in the domain of intellectual development from Piaget and subsequent researchers (Colby, 1975; Perry, 1972; Erdynast, 1979; King, 1981).

The domain of moral development represents the individual's conception of right and wrong, "should" and "ought." (See Appendix, Table 2) The principal findings in this field have been those of Lawrnece Kohlberg (1969, 1981). The domain of social development represents the individual's conceptions of the meaning of good work, good education, good relationships, of other social institutions, and the good life (See Appendix, Table 3). I have conducted research in this field for several years (Erdynast, Armon, Nelson, 1978; Erdynast, 1981) and structural-developmental research in the domain of aesthetic development (See Appendix, Table 4).

> Question: Do the stages of intellectual, moral and social development depend on the student's ability to articulate them rather than on their own decisions and behaviors? Is it a matter of how well students express themselves in a written or oral interview?

The "true" meaning of a stage is really determined by how the individual thinks, feels and acts while in interaction with a situation. Therefore an individual's verbal capacity and responses during interview situations does not necessarily indicate his/her "true" stage. Persons could possibly act at levels lower than their highest level of capability.

But they cannot ever, according to the postulates of the theory, act at levels above their highest level of developed capability. Yet it is true that assessment methodologies tend to depend on verbal responses and to equate the highest level of the individual's verbal responses with the individual's stage of development.

Structural-developmental theories and the principles which underlie the individual's development can be used by educators as a guiding framework in ways that other developmental theories cannot. First, structural-developmental stages connect the "is" of the student's development to the "oughts" of the aims of higher education. For example, the relationship between Piaget's psychological levels of cognitive development and higher education is that hypothetico-deductive thinking, or formal operations, the highest level in Piaget's scheme of development, is an underlying aim in college education. A primary objective of higher education is to stimulate what can be called a natural process of the scientific method of thinking—thinking in terms of hypotheses, of their inferences and of data to support them.

Second, age does not equal stage. Educators cannot assume to know the student's level of development by knowing his age or his year of progress in college. The student's developmental framework can only be known by understanding his own thinking process. While it was generally assumed by Piaget that all adults use hypothetico-deductive reasoning, and by college instructors that all students are capable of it. research findings differ from these assumptions. One study (Kuhn, Langer, Kohlberg, Haan, 1977) of an adult population in California found that no more than

approximately 50 percent of American adults exhibit full formal operational reasoning. Another study (Tomlinson-Keasey, 1976) found that approximately 30 percent of one university's incoming freshmen had not achieved this stage of thinking.

Third, the various domains have an isomorphically parallel relationship to one another. In other words, these forms of thought are distinct but parallel domains in the individual's mental structures. The first set of stages that develops is the cognitive or intellectual set. These are a necessary but insufficient condition for the development of moral reasoning stages; and moral reasoning is a necessary but also insufficient condition for the parallel attainment of the social development stages. Aesthetic development seems to be independent of moral and social development though it is related to cognitive development, but these relationships have not yet been well researched by structural-developmental psychology.

While there is a cognitive-structural commonality among similar levels across domains, the lack of development in some domains prevents further development in others. Attainment of developmental levels in the domain of intellectual development affects all of the others. The student's intellectual development puts an upper limit on the remainder of the student's developmental progress. If the individual does not develop at least concrete operational thought in Piaget's sequence, he cannot attain stage 2 of moral thinking in the Kohlberg sequence. If the individual does not have beginning formal operation thought, he cannot attain stage 4. If the individual does not have full, basic formal operational thought, he could not get to stages 4/5 and 5 in Kohlberg's schema (Colby, 1975).

As an illustration, the values implicit in the American Bill of Rights can be seen to be similar to the values which educational philosophers have argued to be central aims in the development of liberally educated individuals: respect for the rights and liberties of individuals, freedom of thought and belief, tolerance and respect for the different values of individuals in American society and those in other cultures. Every four or five years when the Gallup Poll has circulated the Bill of Rights without its title, it has been systematically turned down. In order for individuals to develop critical belief in the value structures of the Bill of Rights (Kohlberg's stage 5 in natural moral development), hypothetico-deductive reasoning must first be developed. When that does occur, they achieve the conditions for the possible, though not the necessary, attainment of the moral development level of a social contract philosophy.

In the study by Kuhn et al, stage 5 of moral development was consistently absent if the hypothetico-deductive form of thought was not present. On the other hand, people who are cognitively bright, so to speak, are not necessarily morally, socially or emotionally mature at the same high level. In summary, then, the individual's highest stage of cognitive or intellectual development sets the highest potential for his development of stages of moral and social development.

Fourth, structural-developmental stages are hierarchial. Each stage represents a new, more advanced and more adequate form of thinking. Hypothetico-deductive or formal reasoning, for example, is a more equilibrated form of reasoning about the nature of the world than is concrete

operational thought. As a further example, principled moral reasoning is a more equilibrated form of moral reasoning than is conventional moral reasoning.

> Question: Suppose problems and tasks are presented to students which pose a confrontation between where they are and their next stage, what actually motivates the student to develop? Suppose the individual is completely happy with his current capabilities and he is faced with a task which presents a developmental potential, what's to keep the individual from staying at his current level, or who is to say that development is the better thing for him? What is the dynamic that moves individuals upward?

The affective motivational force which seeks development is the need for equilibrium. The need for dynamic, interactional equilibrium is one of the most pervasive human needs. If the individual does not experience or feel in disequilibrium then there would be no motivation to develop further. A higher level represents a more adequate, dynamic equilibrium to the individual since it is usable for solving higher level problems.

Exposure to "plus one," i.e., presenting the next stage of reasoning to the student, is a necessary but insufficient condition for stimulating the student's advance. If the student does not feel conflict or contradictions, or disequilibrium there is no internal motive for development. The Socratic method for inducing disequilibrium is to ask questions which cannot be answered by the student's paradigms. If the student does not understand the questions, or their relevance, there would be no movement toward the questioning of the adequacy of his or her own

paradigm. If, however, the student understands, even if just intuitively, that his or her framework cannot adequately answer the questions, he or she will feel the disequilibrium and the need to move to a new system of thought which is more adequate.

Question: Why do some people not develop?

If an individual's needs are being met by not moving to the next level or if an individual's personal goals do not require higher level attainment, there may be no movement. However, if people are curious and want to know, then through the exercise of will and self-command, and trying and doing they will get to the answers that the next level represents.

Educators need to be sensitive and careful to manage disequilibrium constructively rather than destructively and to be careful also about the amount of disequilibrium with which the student is confronted. Students must be matched with tasks and problems which are manageable from their perspective, tasks and responsibilities with which they can come to grips. While the objective of developmental problems and tasks is to stimulate the re-organization and accommodation of the students' forms of thought, too great a challenge can result in a distressful and perhaps traumatic result. Constructive disequilibrium simply involves the students in some form of "optimal challenge" rather than too much.

Fifth, since these stages develop in an invariant sequence, they can be used to relate the student's current developmental attainment in the direction of further progress in each domain. This relationship applies in each of the four broad domains of intellectual, moral, social and aesthetic development. Within each domain the individual first goes

stage 1, and then stage 2, then stage 3 and so on, through however many stages there are in the particular sequence. While the highest stage is not necessarily achieved, there is no skipping across stages, e.g., from stage 1 to stage 3. While attainment of the highest stage is not inevitable, each next stage is the inevitable step in the progressive sequence, i.e., passing through stage 2 is an inevitable transitional process in order to progress to stage 3.

While progression to the next stage in a sequence could be said to be inevitable if the person develops, development itself is not inevitable. In fact, the more frequent occurrence is that most people are quite complacent and satisfied to stay exactly where they are. Most students do not pursue education and development for their own sake as internalized self-chosen motives. Development tends to proceed erratically, in spurts. The process of development requires considerable motivation and constructivistic activity. The student needs to exert a lot of energy in order to get to the next stage. The individual needs to want to get to the next stage in order to develop, the motivation needs to be strong. In a sense, the individual needs to change a whole vocabulary, the meaning of words change as a whole way of thinking changes. The process of transition involves confusions and competition between two stage structures for the individual's mind, just like two of Kuhn's alternative scientific paradigms, vying with each other for determination by the individual for which one is correct. There is therefore internal tension, a disharmony within the individual. The individual experiences intellectual and affective conflict between the paradigms. Two stages of thought are in competition with one another for defining reality

and stability returns when one of them is chosen to govern.

Sixth, structural stages are transformational and layer-cake in nature. Stage 2 is achieved through the transformation of stage 1 into a more complex, more differentiated and integrated structure. Similarly, stage 3 is created or constructed by the individual through the transformation of stage 2 into a more complex, more differentiated and more integrated structure. Lower stages or levels still exist, and in a layer-cake fashion, they do not disappear, but the individual is aware of the existence of new ways of thinking which differ from previous ones. Lower level forms of thinking can solve certain types of tasks and problems but are not used to solve tasks and problems which can only be resolved by the higher levels of thinking. The transformational nature of development follows the metaphor of biting from the apple of knowledge in the Garden of Eden: each new level transforms the mind's thinking structures at each new stage of thinking and there is no return to the "bliss" of the limitations of the stage 1 structures.

The structural developmental approach to higher education views the individual's development in terms of his or her progressively increasing capacities for independent thinking, critical reasoning and autonomous decision-making. Furthermore, this approach seeks the integration of intellectual personal development with the integration of subject matter knowledge in the disciplines of the physical, natural and social sciences, in the arts and in the humanities. This developmental approach can provide practitioners of field experience education with a comprehensive, guiding educational framework.

Question: Since most college students are present for only four years and contact between a faculty member in an experiential education department and a particular student is no more than once or twice, what kind of objectives should experiential educators have considering the length of time it takes to move from stage to stage and what expectations are appropriate?

Beginning with the student's levels of development at the time of arrival in college, it takes on the average approximately two to three years per transition to the next stage. For all practical purposes stages 5 in moral and social development are empirically very rare among college students, or, at least one can say that they are not distributed in abundance. No more than 10 percent of the adult American population experiences it or chooses to live its lives consistent with those particular values. So then, as an operating premise, only a very small proportion, at best, of college students will be at stage 5. Expecting that all students should reach stage 5 by the completion of their education would be unrealistic. So a more sound objective would be the following: seek maximal current involvement and experiencing within the students' current levels of functioning and maximal reflective thinking about current experiencing. When students are functioning at level 2, they should be respected for it. When level 3 represents their level of development that also should receive respect. The important objective is for the faculty member to help enable them to fully understand and experience their current values, in the service of an overall aim: students should develop a personal perspective which enables them to examine reflectively their values and current beliefs and continue this form of analysis over a lifetime. This type of attitude toward experience and toward self can become a permanent

feature in an individual who values continued development. And, if in their own lives, one or two years later, or ten or twenty years later they are in disequilibrium, where their current levels of functioning are inadequate to the demands of their environments, they will be familiar with the mechanisms of development: self-assessment, constructivism, reflective thinking. They will begin to re-think and will reprocess experiences. Reflective thinking is self-regulative and will stimulate development.

There are dangers and hazards implicit to using developmental stage theories. First of all, there is the most common danger; the equation of persons with stages. Stages are neither stages of behavior nor are they stages of persons. They are stages of capabilities within an individual. Related to the equation of persons with stages is the danger of people being judged according to their stage. There's nothing within stage theory itself that permits the equation or gradation of persons according to their stage any more than it is permissible to judge people according to their color, their gender, or other types of characteristics. The fact that a Martin Luther King exercised a stage of respect for persons and fundamental equality, ethical equality, as a principle to guide his conduct does not make him a better person, or someone else a lesser person. It's a better form of thought but he is not a better person. All persons, according to a principle of ethical equality, are of equal moral worth, independent of their stage. One doesn't go around saying you're a stage 3 person, therefore you are less than a stage 4 person. Being non-judgmental in this manner is required by the principle

of ethical tolerance. This tolerance for differences is itself a naturalistic form of thought which Kohlberg calls stage 5 moral thinking, and evolves ontogenetically in the course of the individual's development.

Along with progress in stage theories has come the development of a series of tables as a way to present the progressions. Unfortunately, people can use the tables to simply add on cognitive stages, affective stages, different moral stages, while basing correlation only on the content of thought, or on the outward behaviors, rather than basing it upon inner perspective and thereby seeing the structure of the schematic whole, and how reason connects with behavior. Thus, Skinnerians take learning theory or environmental learning theory, and look only at behavior.

III. Experiential Education in a Developmental Context

Experiential education has a vital role in the individual's development. A particularly strong effect and outcome of experiential education is that it makes it possible for the individual's personal, social and affective development to catch up with his cognitive development. Experiential education provides the student with opportunities to learn how to appropriately match the various levels of intellectual functioning with real situations and problems in the actual world. The student needs to learn to not use too high a level nor too low a level. Experiences in a variety of roles provide opportunities to test one's self, one's judgment, one's self-concept, to learn what one is developmentally equipped to do and cannot yet do, to explore one's interests, to test and discover one's stress and frustration tolerance levels with different levels of challenge.

Experiential education programs provide sutdents with opportunities to develop a repertoire of skills and abilities. The objective of having a repertoire is that the student has consolidated a variety of diverse capacities which can be used as they are needed, as they are appropriately required.

Experiential components in higher education curricula also make it possible for the individual's social and moral development to catch up to his intellectual development. Social development takes place later in sequence than does moral development which takes place after intellectual development. Intellectual development involves the development of the most abstract capabilities. Shifting over one domain, moral development requires much more experience, experiences of the competing claims of various individuals or the competing claims between the individual and society, as stimuli for development. Shifting over one more domain, social development, especially to higher levels requires extensive experience. The further out along this horizontal sequence of domains the more the amount of experiential education necessary in order for balanced or "equilibrated" development to be achieved.

Experiential education focuses primarily on the individual's social development. The domain of social development represents the individual's conceptions of his interests, his values and his goals. The broad domain of social development includes smaller more discrete domains, or sub-domains, such as the meaning of good work, good education, good relationships and so on through the institutions of social life and activity. Successes and failures by students in their placements

affects not only their development but also satisfies or dissatisfies their affective needs as these are represented by their personal goals in each of the various levels of social development. Successes and failures also affect the students' self-esteem which is related to need satisfaction and to their future choices of goals and commitments. The way that students feel about themselves has a strong effect on how they progress through developmental sequences. In a sense, one can say that cognitive development begets moral development which begets social development. Positive self-concept and self-esteem result from effectively functioning in one's interests at one's level of choice.

Within the context of development as the broad aim of higher education, experiential education programs should be designed so as to incorporate characteristics which promote the students' developmental learning about themselves, themselves and their relationships with other people, and their relationships to society as a whole. The structural-developmental paradigm makes it possible to descriptively understand how students think and what they are thinking about in each of the various domains, and using the developmental perspective also makes it possible to design programs and create situations which make it possible for students to learn and grow.

The most important objective of effective experiential education is an optimal match of students to placements that involve them in assimilating new situations to their current modes of thought and which require them to accommodate their current self-concepts and structures of thought to new adaptational requirements. Several characteristics are necessary in the placements to which students are matched if students'

development is to be promoted:

1) Opportunities for role-taking and for carrying out responsibilities.

2) Active involvement in constructivistic thinking and action.

3) Optimal matching.

4) Exposure to the next higher level.

5) Reconstruction of experience and reflective thinking.

6) Constructive evaluative assessment and feedback: affirmation and enhancement.

Constructivistic thinking and action: Students should be immersed, as much as possible, in problem-solving tasks as opposed to repetitive tasks without intellectual content. Field experience education can provide situations for problem solving thinking and action, which is a form of critical reasoning and reflective thinking. Field experience can be viewed as providing opportunities for thinking along the entire thought process continuum, from a) problem identification to b) problem definition to c) analysis of the components to d) viewing them from a variety of perspectives to e) the selection of one alternative from among many.

Two institutions that follow this particular practice are: (1) the University of Wisconsin at Green Bay, where the curriculum is basically problem-centered and focused on environmental problems. The students are involved with problems in ecology and other problems; they do field experience under the guidance of, and in conjuction with, faculty members and conduct regular directed study whether it is on research methodology, or on environmental science; (2) Temple University in Philadelphia and its program on American Studies. In the program students focus on

problems or issues in American culture and engage in field projects in the city, again, with the faculty and also within an interdisciplinary curriculum.

Opportunities for Role-Taking:

Field placements can be divided according to at least three different levels of role-taking opportunities and responsibilities for students and experiential education programs can be designed so that so that progressively changing roles can be incorporated into them. First level placements would be ones in which the activities of students have consequences for themselves. Traditional internships, for example, typically involve students in some kind of assigned responsibility as they enter an organization. The expectations are that the students will learn the ropes, replicate the work and carry out the responsibilities for that role. The students' learning objectives are to learn a role, practice it, assimilate it and perhaps grow personally, learning about themselves while carrying out their responsibilities.

At a second level, programs can provide placements which involve responsibilities for consequences for others. These types of placements go beyond students learning a role while paying attention to their own personal development, and puts students into situations which require them to be responsible for other people. These are sustained responsibilities for the welfare of others since there are consequences dependent upon the effective performance of the students in their roles.

At a third level, programs can provide placements which provide opportunities for students to be involved in policy formulation. These policies will be carried out by others and will have consequences on groups

of individuals and society. These opportunities provide students with roles which require that they plan and formulate experiences for other people. Students thus take on a kind of social responsibility which requires higher levels of conceptualization.

Each of these three levels of role taking has a different perspective and serves different levels of personal needs. At the first level students are thinking in individualistic and self-centered (in a non-pejorative sense) terms. Opportunities at this level make it possible for students to satisfy these self-centered goals and needs. At the next level the roles provide opportunities for interpersonal and social types of goals and needs to be satisfied.

At the third level the roles provide students with opportunities to think for themselves about the types of goals and standards which should exist for the largest group, society. These opportunities require thinking about what social policies look like to others with differing points of view and satisfy the goals and needs of those who seek complex and elaborate forms of social role interaction.

Optimal matching: Placement in field experience settings should attempt to match the students' current levels of development, their goals, their needs and the opportunities provided by the experiences. When students are challenged beyond their potential capabilities the risk of failure is heightened which, when it occurs, slows down development and impairs future development. When there is no challenge, and the tasks are below the level of the students' capability, the result is boredom, a feeling of being patronized, underemployed, and being intellectually underchallenged.

The optimal match between the students and the learning experiences can be roughly characterized as a "plus one" condition. The optimal educational objective is to try to stimulate development, not to the faculty member's level of thinking but to the next level of development for the student. What happens in a classroom, as well as outside, is that if there is a wide divergence between the student's level of development and the task, the result will be a downward assimilation. People have a natural propensity to make meaning, and if the terms and ideas are foreign, they will be brought down to the student's operation levels.

> Question: There's a big difference between a faculty member making the decision for students about what a good match would be for them and students looking at all the possibilities and making decisions for themselves and taking the risk and suffering the consequences for making the wrong match. Should the faculty member make the match or should students?

Largely, it is the students who should take the primary responsibility for the decisions, conducting self-assessments and making the self-match. Taking primary responsibility for making this decision is consistent with an educational philosophy which has as its aim the development of self-directed individuals in a society. A parallel can be made between self-preparation for field experience placements and the Peace Corps training process which placed strong emphasis on a self-selection process. At some point, however, there is also a supervisory responsibility and a responsibility to the institution which students are to serve. The faculty may have to say to a student, "Yes, you see yourself as fully prepared but I have to say that your sense of adequate preparation and your judgement do not match the required criteria." On the whole,

these discrepancies tend not to arise and the students' own self-match decisions can be supported. Students need to learn what they can do well and what they cannot yet do. Learning by failure is an important aspect to learning because it tells students where they are not yet developmentally ready. A sound experiential education program should have a preparation component before students are placed in a community setting that makes it possible for them to demonstrate for themselves what it is they can do.

Reconstruction of experience and reflective thinking: Education is the reconstruction of experience. It is insufficient for students to simply be involved in the experience and then have it end when they return to campus. They need to be actively involved in reconstructing its meaning and what they have learned from it. They need to process it and conceptualize it.

A policy of requiring that students provide demonstrable evidence of the learning outcomes of experiential edcuation is recommended since personally beneficial outcomes, as well as educational ones, usually result. This type of policy has proved to be very beneficial for adult students who apply for academic credit for "prior learning." Adult students who reconstruct a decade or two decades of experiences discover how much they know through the act of so doing. Self-respect, self-esteem and self-confidence are considerably enhanced when students realize just how much they have learned, how much they know and how much they are capable of doing.

Field experience programs tend to use one of four different policies regarding the reflection phase or the reconstruction of the experience. Some policies do not result in furthering the learning, others do. At a first level, in some co-op or field experience programs, credit is given to students for working or simply for engaging in a field experience. But neither the work nor the field experience is necessarily viewed as resulting in academic knowledge. The co-op credits cannot be used to satisfy academic credit requirements. This dualism stems from the premise that work or field experience is fundamentally different from classroom experience. It is further assumed that the learning outcomes of work or field experience cannot be identified. Or even if they can be identified, it is assumed that they cannot be measured. True to the tradition of Platonic dualisms, work and learning are distinguished from one another, without a meeting ground.

At a second level, co-op or field experience credit is given for knowledge, competency or skill gained from the experience. And at this level the student is asked to list what the outcomes are. Co-op or field experience departments and work supervisors often do not request more than just a rough listing of what the work was and a rather perfunctory evaluation, e.g., was the work done well or not done well? This type of evaluation has little educational value. The optimal educational activity would be for the students to not only list the outcomes, but to also construct the experiences intellectually as they experienced them, the problems as they defined them, their choices for action as they carried through on them, and then to discuss their assessment of the results. The next step would be for supervisors to view the experiences as intellectual

experiences and to provide the students with feedback on the strengths of the students' capabilities and the weaknesses of the performances. The role for the academic faculty members, if they and the supervisors are not one and the same persons, would be to critique the students' intellectual constructions and to provide recommendations for experiences which would stimulate the next level of development. Continuity of experience would thus be emphasized.

At a third level, credit is only given when students perform an analysis of the learning which is then evaluated by a faculty member. A listing of the learning outcomes is insufficient, the learning must be described, discussed and analyzed. In many field experience programs this form of reflection is either achieved through a dialogue between students and advisors or through a small group interaction between students who have engaged in field experiences at the same time. At this level, the credit which is awarded may be academic credit rather than co-op or field experience credit. (One limitation at this level is that field experience often is viewed as only having the potential to stimulate personal growth.)

At a fourth level, work or field experience qualifies for academic credit when it is integrated with formal theory. Experiential learning is integrated with either classwork or with directed studies. In some field experience programs students participate in a seminar group and consciously relate theories from the academic curriculum to the work that they are doing in the field. Another approach to the constructivistic and reflective process is written papers which help the students to integrate academic concepts from various disciplines and subject areas to the work they have done in the field. This type of reflection need not be concurrent with

the work students are doing.

Faculty Roles--Evaluative Assessment Which Is Constructive and Developmental:

The instructor's field placement supervisor's responsibilities are to stimulate the shift in the students' involvement from a passive mode to an active mode, to place students in optimal match situations whenever possible, to stimulate students' development to the next level where appropriate. This may include sharing their own constructivistic thinking so that students are exposed to the mind of another who could have gone through the same experience and have interpreted it very differently.

There are three fundamental roles which faculty can fulfill. The most common role is the faculty member as transmitter of information. The instructor is viewed as having the answers and the role is to transmit knowledge whether it is in the subject matter domain, the value domain or the personal domain. Within this conception one person is viewed as the knower and the other as the learner. The main drawback of this view as an educational approach is that it usually doesn't work. The concept of optimal match helps to explain the instances in which this approach is effective and the instances when it is not. One set of very consistent findings is that, while this approach is most effective with the top 15 percent of classes whose intellectual levels are matched to the structural levels at which instructors transmit, at least 70 percent of the content of that transmission is lost by all students by the end of the first year, and after that almost all of the content "learned" in classrooms is completely forgotten. Furthermore, all indicators related to success in learning content, such as grades, have either questionable or no predictive

value at all. The only things that grades ever predict or correlate with are the following: first, grades correlate to grades. Students who get A's in high school tend to get A's in college and tend to get A's in graduate school; second, good grades correlate to a) becoming a member of a profession (good grades are a condition for admission to graduate school, and b) becoming moderately unhappy. Whatever measures have ever been used to assess success or competence, no correlations have been found other than becoming a member of a profession.

The second role, and diametrically distant from the first, is the faculty member as facilitator. In this role, the faculty member's function is not to stimulate or intrude, he's there to facilitate the student's natural and internally directed evolution while providing support and understanding. This school of thought begins with Rousseau and finds its current manifestation in life-span psychology and its stages or phases of personal development. The two main drawbacks of this approach are that, by only providing support, a "holding" environment is created which may keep the student at a current level without providing stimuli for advance, and secondly, if faculty do not contribute their own knowledge any advance tends to be only personal growth, unaided by a parallel intellectual advance.

The third faculty role is the Socratic: the engagement in a dialectic with the student's experience. This role includes not only affirmation of the student's experience but also challenging the student's current levels of thinking and deliberately stimulating the student's advance to the next level of capability. This is a set of roles which started with Socrates, developed in Dewey, and has become most fully

elaborated through structural-developmental psychological and educational theories (Kohlberg and Mayer, 1972).

The primary idea here in both field experience and classroom education, is that content is not viewed as an end in itself, but content is viewed in the service of process. And process is defined as persons thinking critically and reflectively.

The dialectical role calls for frequent feedback between students and their supervisors. This feedback should be based not only on final written and/or oral reports. There should also be reports early in the course of an activity so that the students can be provided with formative, guiding feedback while there is still time for corrective thought and further experimentation. The underlying reason for this type of feedback is the value of the interaction of the dialectic between the students' minds and the faculty member's mind. Development proceeds when there is disequilibrium. When the experience is disconnected and students reach closure prematurely, there exists the danger of intellectual egocentrism, the belief that because a student has generated a construction, that construction is therefore valid.

The developmental-philosophic view of education is that there are increasing levels of validity and increasing levels of reasoning. It is only when the faculty member challenges the premises, provides contradictory possibilities, that the tension which needs to be resolved is set up cognitively in the mind. Equilibrium, or a stable construction, is then defined by more and more adequate constructions and analyses of the experience.

In addition to bringing their own intellectual forms of thinking into interaction with those of the students, a developmental approach calls for faculty to provide attitudes which are governed by a principle of affirmation and enhancement toward students. Students should be affirmed for what they can do successfully. The principle of respect for persons which manifests itself through affirmation and enhancement differs from the Rogerian principle of unconditional positive regard. Enhancement of the student calls for an appropriate inducement of constructive disequilibrium. Students are frequently exposed to a plus one level of thinking, a level above their own, yet they don't change. They experience no reason or need to do so. They think that they are perfectly competent and therefore they are perfectly satisfied with the outcomes of what they do. Unless they have an affective experience of disequilibrium or inadequacy, unless they have a reason for improving their own modes of thinking, they will have no motivation to construct a new level.

IV. Conclusion: Education for Autonomy

The ultimate aim of a liberal education is education for autonomy, the development of a full and powerful individual (Dewey, 1938, Rawls, 1971). In other words, the appropriate aim of liberal education throughout its classic tradition, from Socrates through Dewey, and most recently Rawls, is the education of full persons, and is to develop the capacities for action from principles that they would choose under conditions that best express their nature as free and equal rational beings. The developmental conception of the Socratic belief about liberal education, that the

unexamined life is not worth living, is a conception of an individual who has experiences at each of the various levels of moral and social development and who then makes a full and personal choice of values and goals for himself or herself. A free and fully developing human being is one who fully experiences each of the various levels as he or she progresses through them, chooses new goals matched to his or her interests and satisfactions and aspirations. Functioning at the higher levels requires more than just cognitive capability to do so, it also requires a choice to do so and commitment to live according to such principles independent of the consequences to the self (level 2 concerns), the opinions of others (level 3 concerns), traditions and authority (level 4 concerns). Full autonomy at levels 5 and 6 develops progressively and comes about sequentially through a hierarchy of levels, each of which plays a part in enabling the individual to eventually construct and choose these higher level principles. Experiencing the implications of principled conduct upon other individuals and upon institutions is a prerequisite to making the active choice and commitment to higher principles before they can be considered higher level commitments.

Experiential education plays an essential role in education for autonomy. Any field experience is potentially a liberal educational experience and becomes one when it is used in the service of the development of the student's independent thinking, critical reasoning and autonomous decision making. Education is not just subject matter mastery, it is the development of the whole person. Experiential activities are necessary if education is to result in more than just intellectual development. Development to higher levels, especially level 5 in moral and social

development, and level 6 in moral development require more than just academic education in the traditional sense, it requires practical experiences in real world settings.

The reconstruction of experience into knowledge, after having engaged in the field experience, can result in further enhancement of self-respect, self-esteem and self-concept. Self-concept is first expanded through successful accomplishment of new higher level challenges. It is further expanded through reflectively understanding how much a person knows through the act of writing papers. The reconstruction of actual experience into knowledge is a process which can in itself lead to the individual's identification of further goals and values as objectives. It is a process which can formalize examining life so that it can be lived as a more meaningful life. Persons say who they are by their purposes and actions, by what they do in their life (Dewey, 1936).

All knowledge is ultimately experiential since knowledge requires a knower in relation to the known. It is what has been learned, not what one has been exposed to, that determines whether a student's learning is of a liberal nature. A liberal education in this sense requires an experiential education.

APPENDICES

Tables I-IV

TABLE I: LEVELS OF INTELLECTUAL DEVELOPMENT

Sensori-motor	Pre-language practical intelligence. Constructions are made with the sole support of perceptions and movements and thus by means of a sensori-motor co-ordination of actions, without the intervention of representation or thought.
Intuitive or Pre-Logical	Inferences carried on through images and symbols that do not maintain logical relations or invariances with one another.
	College Level
CONCRETE OPERATIONS	Inferences carried on through system of classes, relations, and quantities maintaining logically invariant properties and referring to concrete objects. Such logical processes are included as (a) lower-order classes in higher-order classes; (b) transitive seriation (recognition that if a>b and b>c, then a>c; (c) logical addition and multiplication of classes and quantities; (d) conservation of number, class membership, length, and mass under apparent change.
	SINGLE THEORETICAL PERSPECTIVE
FORMAL OPERATIONS I	Beginning: Formation of the inverse of the reciprocal. Capacity to form negative classes (e.g., the class of of all not-crows), and to see relations as simultaneously reciprocal (e.g., to understand that liquid in a U-shaped tube holds an equal level because of counterbalanced pressures. Capacity to order triads of propositions or relations. Basic: True formal thought. Construction of all possible combinations of relations, systematic isolation of variables, and deductive hypothesis-testing.
	MULTIPLE THEORETICAL PERSPECTIVES
FORMAL OPERATIONS II	Multiple frames of reference: Thought process of "informed relativism" which potentially manifests itself in two forms: (a) in the nature of an individual's thinking and problem-solving activity itself; (b) in an individual's "meta-cognitive" stance, i.e., the individual's thinking with respect to the nature of thought and knowledge.

Table I - continued

	SCHOOLS OF THOUGHT
FORMAL OPERATIONS III	Thinking is organized into schools of thought, each of which contains theories which have common assumptions, premises, concepts, and basic agreement on major principles. The differences between schools of thought are based upon fundamental differences in assumptions, premises, concepts and principles.
	EVALUATIVE SCHOOLS OF THOUGHT
FORMAL OPERATIONS IV	Ability to compare and contrast schools of thought against one another in terms of criteria such as construct validity.
	ORIGINAL THEORY
FORMAL OPERATIONS V	Construction of totally new explanatory theory which involves prior familiarity with and evaluation of all existing theories; e.g., the theories of Newton, Darwin, Einstein.

TABLE II: SIX STAGES OF MORAL THOUGHT

Preconventional Level

Stage 1: The Heteronomous Stage

a) What is right: Right is blind-obedience to rules and authority, avoiding punishment, and not doing physical harm to others. Thus, what is right is to avoid breaking rules backed by punishment, obedience for its own sake, and avoiding physical damage to persons and property.

b) Reasons for upholding right: The reasons for doing right are avoidance of punishment and the superior power of authorities.

c) Social perspective: Egocentric point of view. Does not consider the interests of others or recognize they differ from one's own. Does not relate two points of view. Actions are considered in terms of physical consequences rather than in terms of psychological interests of others. Confusion of authority's perspective with one's own.

Stage 2: The Stage of Individualism and Instrumental Purpose and Exchange

a) What is right? Right is serving one's own or other's needs and making fair deals in terms of concrete exchange. Hence one follows rules when it is to one's immediate interest to do so. Right is acting to meet one's own interest and needs and letting others do the same. Right is also what is fair, that is, what is an equal exchange, a deal, an agreement.

b) Reasons for upholding right: The reason for doing right is to serve one's own needs or interests in a world where you have to recognize that other people have their interests, too.

c) Social perspective: Concrete individualistic perspective. Separates own interests and points of view from those of authorities and others. There is an awareness that everybody has their own interests to pursue, and that these interests often conflict, so that right is relative (in the concrete individualistic sense). Integrates or relates conflicting individual interests to one another through instrumental exchange of services, through the instrumental need for the other and the other's good will, or through fairness defined as treating each individual's interest as equal.

Conventional Level

Stage 3: The Stage of Mutual Interpersonal Expectations, Relationships, and Interpersonal Conformity

a) What is right? Right is playing a good (nice) role, being concerned about other people and their feelings, keeping loyalty and trust with partners, and being motivated to follow rules and expectations. Hence right is living up to what is expected by people close to you or what people

Table II - continued

generally expect of people in your role as son, sister, friend, etc. "Being good" is important and means having good motives, the showing of concern about others. It also means keeping mutual relationships, maintaining trust, loyalty, respect, and gratitude.

b) Reasons for upholding right: Reasons include 1) need to be seen as "good" in one's own eyes and the eyes of others, 2) concern for others, and 3) recognition that if you put yourself in the other person's place you would want good behavior from the self (Golden Rule).

c) Social perspective: Perspective of the individual in relationship to other individuals. There is an awareness of shared feelings, agreements, and expectations which take primacy over individual interests. Relates point of view through the "concrete Golden Rule," putting oneself in the other person's shoes. Does not consider generalized "system" perspective.

Stage 4: The Social System and Conscience Stage

a) What is right? Right is doing one's duty in society, upholding the social order, and the welfare of society or the group. Hence one is obligated to fulfill the actual duties to which one has agreed. Laws are to be upheld except in extreme cases where they conflict with other fixed social duties. Right is also contributing to society, the group, or institution.

b) Reasons for upholding right: The reasons for doing right are to keep the institution going as a whole ("what if everyone did it?"), or self-respect or conscience seen as meeting one's defined obligations.

c) Social perspective: Differentiates societal point of view from interpersonal agreement or motives. Takes the point of view of the system which defines roles and rules. Considers individual relations in terms of place in the system.

Postconventional Level

Stage 4/5: The Transitional Stage that is Postconventional but not yet Principled

a) What is right? There is an awareness of relativity of different social standards, so that the orientation is to personal moral values or conscience. "Conscience," however, is the internalized social standards of Stage 4. One has a duty to follow one's conscience. There may be an objective external moral law expressing the essence of social morality.

b) Reasons for upholding right: Moral choice is personal and subjective. It is based on emotions and hedonism rather than conscience, since conscience is seen as arbitrary and relative, as are terms like "duty,"

Table II - continued

"morally right," etc. Hence one's moral decisions are personal and subjective, unless they impinge on rights of others. Morality is arbitrary and relative because one has the right to free choice. Rights, however, are bounded by the like rights of others.

c) Social perspective: Subjective and "outside of society." The perspective is that of an individual standing outside of his own society and considering himself as an individual making decisions without a generalized commitment or contract with society. One can pick and choose obligations which are defined by particular societies, but one has no principles for such choice.

Stage 5: The Stage of Social Contract or Utility and of Individual Rights

a) What is right? Right is upholding the basic rights, values, and legal contracts of a society, even when they conflict with the concrete rules and laws of that society. Hence there is an awareness that people hold a variety of values and opinions and that most values and rules are relative to a specific group. Because they constitute the social contract, these "relative" rules should usually be upheld. However, some non-relative values and rights like life and liberty must be upheld in any society regardless of majority opinion or specific laws if those values are endangered.

b) Reasons for upholding right: Reasons are, in general, that Stage 5 reasoners feel obligated to obey the law because they have made a social contract to make and abide by laws for the good of all and to protect their own rights and the rights of others. There is the feeling that family, friendship, trust, and work obligations are also commitments or contracts they have freely entered into and entail respect for the rights of others. They are concerned that laws and duties be based on rational calculation of overall utility, "the greatest good for the greatest number."

c) Social perspective: Prior to society perspective. The perspective of a rational individual aware of values and rights prior to actual social attachments and contracts. Integrates perspectives by formal mechanisms of agreement, contract, objective impartiality and due process. Considers "moral point of view," "Legal point of view," recognizes they conflict and finds it difficult to integrate them.

Stage 6: The Stage of Universal Ethical Principles

a) What is right? Stage 6 is guided by universal, self-chosen ethical principles which all humanity should follow. Particular laws or social agreements are usually valid because they rest on such principles. When laws violate these principles, one acts in accordance with the principle.

Table II - continued

Principles are universal principles of justice: e.g., the equality of human rights and respect for the dignity of human beings as individual persons. These are not merely values which are recognized, they are principles used to generate particular decisions.

b) Reasons for upholding right: As a rational person, the Stage 6 reasoner has seen the validity of principles and has become committed to them.

c) Social perspective: Perspective of a "moral point of view" from which social arrangements derive or on which they are grounded. The perspective is that of any rational individual recognizing the nature of morality or the basic moral premise of respect for other persons as ends, not means.

Table from: Kohlberg, Lawrence, Standard Scoring Manual, Harvard University June, 1978

TABLE III: ADULT LEVELS OF SOCIAL DEVELOPMENT: THE DOMAIN OF EDUCATION

Level 1:

Education is required by authorities and compulsion of force. The motive for pursuing education is fear of punishment and hurt.

(No adult examples)

Level 2:

The motives for education are utilitarian and pragmatic. The purpose of a good education is to get jobs, increased income, promotions.

EXAMPLE: What is a good education?

"The knowledge and skills necessary for advancement in the business world. This would increase my position on the checkerboard of life, increase my income and allow more flexibility in my life."

Level 3:

A good education equips the individual to be of service and helpful to others. Satisfaction and a sense of self worth are gained in serving the needs of others. Successful performance results in approval from one's peers and satisfies the desire to be appreciated.

EXAMPLE: What is a good education?

"A good education would prepare a person to be able to help others which is really a wonderful feeling. Why? There are personal satisfactions and the rewards to be gained in helping others."

Level 3/4:

A good education results in personal growth and self awareness. Education is viewed as a lifelong process which involves continuous growth.

EXAMPLE: What is a good education?

"A good education means getting to better understand myself which will give me the tools to work with others in a professional capacity. To fulfill a need in myself to become a more valuable person in relation to my world."

"Education is a life long process; what we learn in school, relationships and life itself is education. I feel if I am ever through with my education, I will stop growing. Life is important to me and that is what education is all about, education gives us the tools, and makes life the ultimate journey.

"A good education means improving oneself because of certain classes I have taken. I am now beginning to understand myself and others around me. It

Table III - continued

makes a difference to me now to learn and understand--basically that provides one with a sense of harmony--that is what I am striving for I guess. Education is learning about and how to appreciate the world around me."

Level 4:

Education is the acquisition of structured and formalized knowledge. The purpose of education is to prepare individuals to become successful and productive, professional members of society. Motivations for a good education include desires for prestige, status, authority and distinction.

EXAMPLE: What is a good education?

"Education has always been the most important means of transferring the wealth of knowledge and tradition from one generation to the next. The continuance and health of human society is dependent on education."

"What I want from education is some theoretical base as to what I am likely to encounter later in my professional work. I want the education to stimulate some pertinent questions in my mind so that I will know they exist and will seek answers. I am striving towards maximum understanding of my field. Without that, success of my future profession is impossible to achieve. I feel that in the field that I have chosen, it is impossible to reach the limit of being at a point where one knows everything. And the more a good professional realizes how little he knows, the more he strives to know."

Level 4/5:

A good education is the development of the individual's creativity, his personal growth. Educational goals evolve from the self and each individual develops a personal, subjective frame of reference. The motives for education are continuous personal growth and change.

EXAMPLE: What is a good education?

"I want to grow intellectually, become increasingly aware and receptive of alternate ideas. I also want to expand my creativity, and social awareness. With these objectives in mind, and the realization of the fact that they really are not goals but continuing processes, I would like to apply what knowledge I have acquired to the task of helping others help themselves."

"A good education allows each individual to explore and expand their own reasoning abilities by providing a structure that compels the individual to review personal belief systems, conceptualize other belief systems, and dispute or integrate them into one's personal frame of reference."

Table III - continued

Level 5:

Education is the development of independent thinking, judgment and self-command. The purpose of a good education is to develop in individuals the capacity and will to see service of the community as their primary dedication.

EXAMPLE: What is a good education?

"The aim of education should be the development of general ability for independent thinking and judgment. If a person masters the fundamentals of his subject and has learned to think and work independently, he will find his direction and will be able to adapt himself to progress and change. A good education is the awakening and strengthening of the willing and joyous desire for knowledge and its application. The aim must be the training of independently acting and thinking individuals, who see in the service of the community their highest life purpose."

TABLE III: ADULT LEVELS OF SOCIAL DEVELOPMENT: DOMAIN OF WORK

Level 1

Attention is placed on the physical and physiological effect of work and its effect on the individual with a noted absence of attention to the personal benefits the work might have to the self.

EXAMPLE: What is good work?

"For me good work is any job where I don't feel afraid or frustrated before I start working. Regardless of pay, no job is worth dying for."

Level 2

Good work is making money to provide for your food and necessities.

EXAMPLE: What is good work?

"You make a lot of money to pay for food and stuff and you help alot of people."

"Making a living is on my shoulders and I try to provide a decent living."

"The film business because there is alot of areas you can keep busy and make money. And you can make as much money as you want and are willing to be involved with. Plus it's fun and interesting."

Level 3

Good work brings the individual feelings of contentment and satisfaction from doing something useful and beneficial to others. Satisfactions come from work and roles which are seen as typically helpful to others."

EXAMPLE: What is good work?

"I think that any work that deals with people is good work. . . helping people. . . teaching is very worthwhile because of the human interaction and you feel you're doing some good and you're receiving back from it all the time."

Level 4

Good work can be any type of work which is considered worthwhile to the self and produces something useful to others from the point of view of society.

EXAMPLE: What is good work?

"In the first place, it should be something useful. In the second place, it should be something that you at least feel comfortable with, if not enjoy. It should be of some value to yourself or society at large, or an ideal that you are commited to. Virtually anything can be of value."

Table III - continued

"Good work should provide a service to others. By serving this purpose, it brings personal satisfaction to others. Why? To be an active, social individual, I must offer service to others as well as to myself. I see work as meaningless when it doesn't have a social purpose."

Level 4/5

Good work is determined by work which stimulates personal growth, self-fulfillment, self development, and a satisfaction of the individual's internal needs.

EXAMPLE: What is good work?

"Any type of work that involves personal growth through introspection, and integration in which the individual feels a personal sense of responsibility, dignity and worth. For years I held the belief that one researched the job market, determined what was needed and filled it. The focus was on the external needs of the job market, rather than the possibility of consulting my own internal needs. After years of "fitting in" the job market, I observed myself becoming stale and impersonal and determined a change would be necessary. After careful and deliberate consideration, I began to move toward goals that best suit my internal needs. Therefore, a good job is that which considers the internal needs rather than the external needs of the individual."

Level 5: Autonomy

Good work involves combining the individual's interests and capabilities into professional fields. There's continued development in the individual's capabilities which are channeled towards a combination of personal satisfaction and social benefit from the application of the individual's talents.

EXAMPLE: What is good work?

"Good work is when I'm advancing knowledge in my field. That kind of work can improve the quality of life for people. For me it means that I am operating at my own highest level of capability and advancing my capabilities in the process. My work is not limited to my job; it's a way of understanding human life and nature which goes beyond the professional boundaries. It is also a life style for me and at the same time I can bring my understanding of life into the classroom. So when I analyze social events some of those thoughts become part of the topic and curriculum in the classroom."

TABLE IV: ADULT LEVELS OF AESTHETIC DEVELOPMENT

Level 2:

Beautiful art induces either positive and pleasant emotions or negative and unpleasant emotions in the viewer. There is no separation between the potential inherent aesthetic qualities or properties within a particular piece of art itself and the particular qualities and properties perceived and experienced by the viewer.

EXAMPLE: "I don't believe (this piece of work) is beautiful. For me these drawings are too stark for beauty—there is no warmth, no happiness, nothing uplifting. There is no flow, no spirit. I don't see any beauty at all. It is broken up, disjointed—generally not pleasing."

Level 3:

Beautiful art elicits responses of aesthetic appeal and joy in the viewer. Beauty is relativistic, so that what is beautiful to one person may not necessarily be beautiful to another. Yet there is the assumption that everyone shares the same conventional aesthetic responses and appreciation for flowers, babies, sunsets, sunrises, etc. Beauty is found in art which involves storytelling in concrete representation of emotions not in abstract art.

EXAMPLES:

"The picture is beautiful. The lady's face is distorted, she is neither smiling, or frowning, this gives a gloomy quality to the picture. There is contrast, with dark and light, with very good lines, some long some short. All of the lines are rounded and seem to be going in one direction. I see also solemnity in others words gloomy, but beautiful, from an artistic point of view."

"It makes my eyes feel good and my heart sing. What is beautiful to me may not be beautiful to you. I think that beauty is learned in each culture. Well . . . I feel that all people must feel that certain things are beautiful. Like flowers and young animals . . . baby things. Everyone has these in common."

"I think everybody thinks sunsets and sunrises are pretty . . . beautiful . . . it's relaxing . . . it's always sort of amazing to see the sun go up and down. It always makes you kind of in awe to look at it.

Level 3/4:

Beautiful art is represented in the artistic representation of life and its underlying forces, e.g., transition from disorder to order, from distortion to harmony, from pain to joy.

Table IV - continued

EXAMPLE: "Yes, this picture is beautiful because it moves from distortion to symmetry. It depicts order from disorder. It appears to be a person looking at herself in a mirror. Her first view is dark and distorted. She then starts to move toward lightness and perception. This is very much how life may be viewed by a person seeing or perceiving herself, or perceiving how others might view her.

Level 4:

Beautiful art is the artistic ability to represent and interpret nature. It is an expression of loveliness which evokes an intellectual as well as an emotional response.

EXAMPLE: "Beauty in the art of a child or the art of Picasso, whether the art is meant as pleasing, thought provoking, or grotesque, is in the human ability to execute it—to see nature and interpret it—in any form whatsoever.

Level 4/5:

Beauty in art is subjectivistically determined. Objective definitions and criteria are believed to not exist. A piece of art is beautiful if the artistic rendition represents the beauty in the artist's own subjective experience.

EXAMPLES:

"I cannot say whether or not this picture is beautiful because beauty is subjective. I can only say whether or not this picture is beautiful to me. Aesthetics, such as whether something is beautiful or ugly is an issue of personal taste and individual interpretation. A general definition cannot be applied."

"I think it's beautiful, the way the lines are shaped. I think it's beautiful the way the artist views or sees his subject inside his own head; in other words, the interpretation of what the artist sees or feels when he looks at this particular woman. This picture makes me think."

"This is beautiful to begin with for it is an expression of creativity in itself. Also, one can see a glimpse of the artist's own experience as a creation and how he experiences his subjectivity."

Level 5:

Beautiful art is the expression of objective and universal ideas and qualities of beauty including formal properties such as grace, essence, integrity, balance, harmony, symmetry, simplicity. Beautiful art involves the expression of the artist's subjectivity while simultaneously transcending the subjectivity of both artist and subject. For example, an archetypal rendition of a "beautiful female" can go beyond the particular model to become a beautiful form and arrangement of lines, which then speaks to the beauty of the human mind's ability to conceptualize and express beauty.

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Table IV - continued

EXAMPLES:

"I admire the whole piece for its different parts, that work together in a whole, for its evocative qualities, simplicity, for its revelations of life."

"It is beautiful because it uses the minimum of geometric forms--the sphere, cone and cube. . . to achieve the maximum variation of expressiveness . . .. It is intellectually beautiful. It appeals to one's reason . . . one's need for proportion and balance or harmony of wholeness. The parts radiate within the overall composition."

BIBLIOGRAPHY

The Carnegie Foundation for the Advancement of Teaching, San Francisco: Jossey-Bass, 1977.

Colby, A. "The Relation between Moral and Cognitive Development." In D. Bush and S. Feldman (eds.) Cognitive Development and Social Development: Relationships and Implications. New York: Lawrence Erlbaum Associates, in press, 1975.

Dewey, J. "The Reflex Arc Concept in Psychology" in Dewey, J. The Structure of Experience, Vol. II, New York: Random House, 1964.

Dewey, J. Democracy and Education. New York: MacMillan, Free Press, 1944. (Originally published 1916).

Dewey, J. Experience and Education. New York: MacMillan Publishing Co., 1963. (Originally published in 1930).

Erdynast, A. "Relationship between Intellectual, Ego, Moral and Social Development in Piagetian Theory and Its Implications for the Helping Professions." Proceedings of the 12th Interdisciplinary Conference, 1982.

Erikson, E. Childhood and Society. New York: W. W. Norton, 1950.

King, P. "Reflective Judgment: Concepts of Justification and Their Relationship to Age and Education." Working paper, Ohio State University, 1980.

Kohlberg, L. The Philosophy of Moral Development. Essays on Moral Development. San Francisco: Harper and Row, 1981.

Kohlberg, L. "From Is to Ought: How to Commit the Naturalistic Fallacy and Get Away with It in the Study of Moral Development." In Essays on Moral Development. Volume I: The Philosophy of Moral Development, 1981.

Kohlberg, L. "Stages and Sequences: The Cognitive-Developmental Approach to Socialization." in D. Goslin (ed.), Handbook of Socialization Theory and Research. New York: Rand McNally, 1969.

Kuhn, D., Langer, J., Kohlberg, L. and Haan, N. "Development of Formal Operations in Logical and Moral Judgment." Genetic Psychology Monographs, 1977 (5), pp. 97-188.

Levinson, D. The Seasons of a Man's Life. New York: Ballantine Books, 1978.

Neugarten, B. "A Developmental View of ADult Personality." In James E. Birren, ed., Relations of Development and Aging. Charles C. Thomas, 1965.

Peel, A. The Psychological Bases of Education. 2nd edition. London: Oliver and Boyd, 1967.

Perry, W. Forms of Intellectual and Ethical Development in the College Years: A Scheme. New York: Holt, Rinehart and Winston, 1972.

Piaget, J. Six Psychological Studies. New York: Random House, 1967.

Piaget, J. The Origins of Intelligence in Children. New York: International Universities Press, 1952.

Rawls, John, A Theory of Justice, Cambridge, Mass.: Harvard University Press, 1971.

Sheehy, G. Passages. New York: E. P. Dutton, 1974.

Tomlinson-Keasey, K. "Can Doing Promote Thinking in the College Classroom," The Journal of College Student Personnel, 1977.

Whitham, M. "Proposal for Design of 'Social Perspective Taking' Workshop," unpublished manuscript, preparatory notes for NSIEE 1981 Conference.